

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An electronic ~~circuit~~circuit, comprising:

a shift circuit ~~for shifting~~that shifts j-bit digital data (j is a natural number) to be converted into k-bit digital data (k is a natural number); and

a correction circuit ~~being~~that is electrically ~~connected~~coupled to the shift circuit, the correction circuit continuously ~~changing~~changes the k-bit digital data ~~which~~that is obtained by the shift circuit in accordance with the change of the j-bit digital data.

2. (Currently Amended) The electronic circuit according to Claim 1,

~~wherein~~ the k-bit digital data ~~is~~being extended digital data which is larger than the j-bit digital data; and

~~wherein~~ the shift circuit ~~classifies~~classifying a range of the j-bit digital data into a plurality of groups and ~~shifts~~shifting the digital data of each group by a predetermined number of bits in accordance with each group to convert it into the k-bit digital data.

3. (Currently Amended) The electronic circuit according to Claim 2,

~~wherein~~ the correction circuit ~~is~~being electrically ~~connected~~coupled to electro-optical elements;

~~wherein~~ the j-bit digital data ~~is~~being luminance gray scale data ~~for controlling~~that controls the luminance of the electro-optical elements; and

~~wherein~~ the k-bit digital data ~~is~~being extended luminance gray scale data ~~for controlling~~that controls an amount of analog current ~~which~~that is supplied to the electro-optical elements.

4. (Currently Amended) The electronic circuit according to Claim 1,

~~wherein~~ the correction circuit ~~is~~being an adder.

5. (Currently Amended) The electronic circuit according to Claim 1,
~~wherein the shift circuit determines the determining a number of bits by which~~
the j-bit digital data is shifted in accordance with the value of the j-bit digital data.

6. (Currently Amended) The electronic circuit according to Claim 5,
~~wherein the shift circuit performs performing shifting to the upper side so that~~
a larger value group is shifted by a larger number of bits.

7. (Currently Amended) An electro-optical device ~~device~~, comprising:
a control circuit ~~for outputting that outputs~~ j-bit luminance gray scale data (j is

a natural number);
a driving circuit ~~for generating that generates~~ analog driving signals based on
the j-bit luminance gray scale data; and
a pixel circuit ~~for driving that drives~~ current driven elements based on the

~~wherein the driving circuit comprises including:~~
a shift circuit ~~for shifting that shifts~~ the j-bit luminance gray scale data to
convert ~~it the data~~ into k-bit digital data (k is a natural number);
a correction circuit ~~being that is electrically connected coupled~~ to the shift
circuit, the correction circuit continuously changing the k-bit digital data ~~which that is~~
obtained by the shift circuit in accordance with the change of the j-bit luminance gray scale
data.

8. (Currently Amended) The electro-optical device according to Claim 7,
~~wherein the k-bit digital data is being extended digital data which that is larger~~
than the j-bit luminance gray scale data; and

~~wherein the shift circuit classifies classifying a range of the j-bit digital data~~
into a plurality of groups and ~~shifts shifting~~ the digital data of each group by a predetermined

number of bits in accordance with each group to convert ~~it~~the digital data into the k-bit digital data.

9. (Currently Amended) The electro-optical device according to Claim 7,

~~wherein~~ the correction circuit is being an adder.

10. (Currently Amended) The electro-optical device according to Claim 7,

~~wherein~~ the shift circuit determines the determining a number of bits by which the j-bit luminance gray scale data is shifted in accordance with the value of the j-bit luminance gray scale data.

11. (Currently Amended) The electro-optical device according to Claim 10,

~~wherein~~ the shift circuit performs performing shifting to ~~the~~an upper side so that a larger value group is shifted by a larger number of bits.

12. (Currently Amended) The electro-optical device according to Claim 7,

~~wherein~~ the current driven elements are being EL elements.

13. (Currently Amended) The electro-optical device according to Claim 12,

~~wherein~~ the EL elements comprise including light emitting layers made of organic materials.

14. (Currently Amended) An electronic apparatus-apparatus, in which the electronic circuit according to Claim 1 is mounted thereon.

15. (Currently Amended) An electronic apparatus-apparatus, in which the electro-optical device according to Claim 7 is mounted thereon.